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## MISCELLANEA.

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I.—*The Harvest of 1868.*

A LETTER reprinted below, which Mr. Caird recently addressed to the Editor of the *Times*, offers an excellent illustration of the value of our agricultural statistics:—

“The publication of the agricultural returns of the United Kingdom affords the basis for an estimate of the yield of the last crop, which, with your permission, I venture to submit for consideration.

“The yield of wheat has been ascertained in various parts of the country, and, with the exception of that grown on shallow gravels and light sand, it is pronounced nearly equal to the fine crop of 1864, but not so good as the abundant crop of 1863. It is nearly as much above an average, as the crop of 1867 was below it. My own inquiry and observation, lead me to the conclusion that thirty-two bushels, or four quarters an acre, may be safely reckoned as the yield of this year, which is five bushels an acre above the yearly average yield of the United Kingdom.

“So far we did not need the agricultural returns to help to this conclusion. But without them we could not have known that upwards of 300,000 acres had been added to the breadth under wheat, and that thus, beyond the bountiful yield of each acre, we have this year secured an addition of one-twelfth to the acreage, which is the same thing as an additional month’s home supply. The money value of this knowledge may be difficult to estimate. If we reckon its influence on price at but 1s. a quarter on the total consumption of the country, the cost of obtaining these returns will be repaid to the public one hundredfold.

“At four quarters an acre the wheat crop will give 15,700,000 quarters, and if the annual consumption is taken at 20,500,000 quarters, the foreign imports absolutely required will not exceed 5,000,000 quarters. But as we began one month earlier than usual on the present crop, and as the old stocks were exhausted, we ought not to reckon on less than an additional month’s consumption of foreign corn to make the country safe to next harvest. This will increase our demand for foreign wheat and flour, within the harvest year, to a total of 6,500,000 quarters. The importations of the first two months of the harvest year—August and September last—having been very nearly on this scale, it would

seem that the present range of price in this country is not more than is required to draw from abroad the necessary supply.

"The cost of imported wheat in the current year will be about 15,500,000*l.* Last year it was 31,000,000*l.* The highest average price of the year was reached in May, 73*s.* 11*d.*, from which it has fallen in four months to 53*s.* 7*d.*, or rather over 20*s.* a quarter. But this saving of 15,500,000*l.* in the price we shall have to pay for foreign wheat, will be considerably diminished by the deficiency in the barley and oat crop.

"These I reckon to be at least one-fifth below an average crop, and there being likewise a deficiency in the acreage, the ordinary money value of the barley and oat crops of the United Kingdom, will this year be probably 10,000,000*l.* under an average. Of this rather over one-half applies to the oat crop, a large portion of which being consumed on the farm, the loss will fall more heavily on the farmer than on the public.

"The hay and green crops are also greatly deficient. It would be very difficult to place a money estimate on this deficiency, but the loss of these, which are the basis of stock husbandry and productive corn crops, will seriously trench upon farming capital. A large import of cheap feeding stuffs will be required, for which preparations are already being made in America, where in the valley of the Mississippi the growing crop of Indian corn is said to be unprecedented in abundance. A system of transport has been arranged by the Illinois Central Railroad for the shipment from Cairo to New Orleans, of 10,000 quarters daily, in the expectation of orders from Europe at New Orleans to take off this supply.

"The potato crop remains to be considered. There is an increase upon it of 80,000 acres—somewhat more than one-twentieth of the whole extent. It will prove an average crop, the second growth, which began after the rains in July and August, having added greatly to the bulk. Both first and second growth seem to be sound, but, as the first crop has ripened earlier than the second, there will be some risk in storing; to prevent which the potatoes should be left as long as they safely can be, to ripen fully before being taken from the ground. In Surrey, on good land, I have found the proportion of second growth to first as four tons to five, the additional four tons being due to the fertilising action of the rain falling on a soil in the condition of a hotbed. In the northern parts of the country and in Ireland, where the first crop did not ripen so early, the proportion of second growth will doubtless be less. As yet, there is very little disease, and if the late crop can be safely stored, there is a fair prospect of a plentiful supply of this wholesome article of food, a matter now of some importance in England, and of the highest value to Ireland. It has been thought that the second growth might seriously injure the edible and nutritive quality of the first, from which it springs. On trial, I have found this not to be so. The root of the first growth proved the driest and most mealy potato, the second growth from the same root—nearly the same in size—being equally sound, but more waxy and less ripe.

"On the whole, the harvest of 1868 will prove a productive one

of wheat and potatoes—the main food of the bulk of the population, which will thus be supplied at a moderate price. But there will be a great deficiency in the food of live stock, and a very serious loss in that branch of agricultural industry.

“An abstract of the returns for the United Kingdom was this year issued on the 20th of September. When we consider the novelty of the inquiry, the objections in some quarters still entertained to it, and the mass of returns that must be obtained, corrected, arranged, and tabulated before such an abstract can be prepared, we must feel that the highest credit is due to the Board of Trade and the Inland Revenue for their management of this interesting and important subject.”

## II.—*Trades Unions and London Shipping.*

THE following suggestive article recently appeared in the *Economist* :—

“The Trades’ Union Commissioners have just issued a ninth report, which is mostly devoted to the recent state of shipbuilding on the Thames, the consequent distress, and the effect of the unions upon both. Both shipbuilders and working men were examined, and though other matters are still dubious, two points were distinctly brought out which, on account of their general importance, ought to be considered.

“The rate of wages for shipwrights was fixed in the year 1825 by what is called the London book, and fixed with sole reference to a very fine class of work—the repair of wooden ships of high class and great durability. In the year 1825 a very large part of the shipping of England consisted of British-built ships of the best class, and the repairing of these was a work intrinsically costly, requiring good labour, and able to pay good wages; it was like mending a jewel—you wanted to preserve as long as you could something very valuable. This work did not, it is true, regulate the building of ships expressly; but it appears to have formed a kind of standard by which the shipwrights engaged in building regulated their demands; and what is even more important, ship repairing is a great deal more profitable than shipbuilding, and therefore the ‘book’ which ruled in ship mending settled, in fact, the most important component in the capitalist’s profit. The London book was a code of high rates for fine work, incidentally and practically regulating all other work.

“But during the last few years the whole tendency in the wood shipping trade, as in so many other trades, has been to substitute a lower-class article, and a less durable article, for the old high-class article. The tendency of modern trade is to make cheap things to last a short time, rather than dear things to last a long time, and, in the shipbuilding trade especially, the colonial ships, made of less lasting Canadian wood, have altogether changed the practice. A

wood ship now does not last as long or nearly as long as it did twenty years ago. The work is inferior, work done to last a shorter period. The repairing trade is even more altered; it is now the repair of an article far less durable and costly; it does not, speaking generally and as a rule, require such fine work, nor can it afford to pay as high wages. Like so many others the business is more rough and ready; it is quicker, cheaper, and less elaborate.

"But the 'London' book has been immovable; it kept in the new rapid trade the same rules which were made for the old slow trade; it required for the repair of the new short-lived article the same rate of wages as for the repair of the old and long-lived one; it charged for inferior work, suited to modern uses, the same price as it used to charge for the superior work which alone was wanted formerly. The effect is clearly stated by Mr. R. Steele, a Greenock shipbuilder:—

"17,426. (Chairman). Have you at all compared the rate of wages in Greenock and the rate of wages in the part of the Thames where shipbuilding is carried on?—Our rate would be, I think, fully 30 per cent. below the Thames.

"17,427. And is that 30 per cent. lower made up by the purchasing power at Greenock over the purchasing power at Blackwall; that is to say, taking house rent, provisions, and other matters, do the higher prices of London swallow up the higher wages, so that the man's living is nearly the same in either case?—I really do not know how that is.

"17,428. You can only say that there is 30 per cent. difference in money?—Yes, in money."

"The consequence is that no one repairs an inferior class ship in London who can conveniently repair her elsewhere. In many cases ships are taken round to other ports to be repaired, and classed more cheaply; and in many more cases, the voyages of ships are arranged so that they come home to, and be repaired at, ports where the charges are less prodigious. And the wood-building trade of London is more and more confined to the building of the most expensive class of durable ships—a kind of trade the proportion of which to the rest of the trade is diminishing year by year.

"This restriction of the trade of London appears to be due entirely to the 'unions.' The 'union' fixed the 'book' in 1825, and it has been impossible to alter it since. It is a tariff-treaty of great complexity, and any master who attempted to alter bits of it, and to adapt them to modern changes, would be at once resisted by the 'union,' and probably would not be much supported by other masters. 'A small change,' they would say, 'is not worth a great row,' and yet it is only by a series of small changes that a book of many prices for many different things ought to be altered. 'The rates,' says Mr. Wigram, 'were this sort of thing. Taking out and putting in a plank of a certain thickness was paid so much a foot in length; taking out timber so much a foot cube.' Such a 'book' is an iron band upon a trade, for it is not worth a great contest to alter single details, so the whole stays on till its aggregate pressure has driven trade elsewhere.

"It generally happens that a place which is 'rough and ready,' in one great class of articles, is 'rough and ready,' too, in any new

kind of analogous articles, and that a place which is suited only to an elaborate sort of the old commodity, will be suited likewise to an elaborate sort of the new. The 'tone' of the place, as it is called, causes this. Enterprising people, and people of inferior skill, flock to the one; steady wealth and finished skill accumulate in the other; each kind of man is attracted to the market which best suits him. Just so London, which, by the effect of the 'book,' became exclusively fit for first-rate wood ships, is now suitable only for first-rate iron ships, though they are wholly beyond the 'book.' Mr. Samuda tells us:—

" 'I have here a paper sent to me from various firms, and arranged by myself, which represents the comparative wages that were paid at the same time in the different large shipbuilding ports of the kingdom. Perhaps it would be the most convenient course for you if I gave you the result. It comes to this, that supposing the price in London to be taken at 100, Birkenhead would be 92, Newcastle 82, and Glasgow 76—24 per cent. difference between Glasgow and London. This table was arrived at by obtaining particulars from the great establishments in various parts of the kingdom, which I will read over to you—Napiers of Glasgow, Denny Brothers of Dumbarton, Palmer of Newcastle, Laird Brothers of Birkenhead, and then in London the Thames Ship Building Company, Samuda, the Millwall Company, Dudgeon's, Green's, Wigram's, and Fletcher's. That is the general result of the whole.

" '16,728. (Chairman.) Did they produce at 76 per cent. as good an article in Glasgow as was produced in London at 100?—I am not inclined to agree to that; I think that there is a great misapprehension as to that. In some cases I believe that you can get a cheaper ship produced in the north than you can get in London, because the speciality of the north is devoted to building vessels of that particular description, but if they are called upon to produce that which is the peculiar speciality of London to produce—the highest class of work, my experience has never shown me that it could be produced cheaper in the north than it could be in London.'

" Very curiously to those who have not seen by study and experience how easily places acquire a trade character, and how sure that character is to spread into similar new trades, the peculiar stamp of the old wooden shipbuilding of London, is also impressed upon its new iron shipbuilding. But what bearing has this on the distress? If people fit for a certain kind of trade live at a certain place to carry on that trade, there is no special reason why at that place they should be particularly distressed; on the contrary, being just suited to the local demand, they ought to be remarkably well off. The missing link is 'Overend, Gurney, and Co.,' or rather that vicious kind of business which it fostered, and of which its own trade was the type. By reckless advances from Overends and others, several companies started up on the Thames on a great scale, which had no knowledge of the special high class shipbuilding of London, and if they had, could not have found it to carry on, its quantity being so limited. 'From the facilities,' says Mr. Samuda, 'given to undertake large operations, a number of establishments were started on a large scale, which had not grown to that large scale by experience, and the consequence was that the only description of work which they could get, was not that work for which London is specially adapted, but such work only as they

could obtain in competition with the rest of England, and that, therefore, their failure became more rapid and more complete because they were competing for work which they were incapable of obtaining a paying price for.'

"The introduction of this new capital into the London trade was, of course, a harvest to the London shipwrights. The 'union' was for the time despotic. They could get high wages from a new company wanting new labour; they could exact the same from old firms unwilling to lose their regular labour, and after a little time the 'union' could make the high new rate universal and compulsory. Of course these companies were doing a ruinous trade, but did not give less wages on that account. 'Taking,' says Mr. Samuda, 'the period since I began business as a shipbuilder in 1851, every single establishment that was in existence as an iron shipbuilding establishment on the Thames at the time that I began business in 1851, with the exception of my own, has either failed or discontinued to work as a shipbuilding establishment.'

"16,747. (Mr. Hughes.) Green's have not failed, have they?—Green and Wigram were not iron shipbuilders then; they have only just taken to building iron ships. But every single establishment that was in activity or in existence as an iron shipbuilding yard on the Thames when I began to build in 1851, and several that have started since, have either broken down, failed, or given up because they could not make money. Yet, notwithstanding that this has taken place, such an impression existed that profit was being made to a large extent by all these establishments, that the workmen did not hesitate to demand, and did obtain, a rise in wages to the extent of 15 per cent. during this time, under the belief that these were all healthy, and that they were profitable undertakings, and that they the workmen were not getting their fair share of the profits out of the undertakings; and yet every one of these establishments which have contributed this additional money to the workmen, although they had very excellent wages before, have, after having done so, finished by terminating their own existence. This has been the fate of London.'

"The nature of the shipwrights' distress in London is, therefore, very clear. In consequence of one set of curious circumstances, the paying shipbuilding and ship repairing business in London was of a most limited and peculiar character, and in consequence of another set a number of new undertakings had endeavoured to augment that trade. The rate of wages, already higher than at the outports, had increased, and more and more hands collected to take advantage of it. When the collapse came, the limited and special ship business of London was called on to find work for the persons whom an attempt to extend that business, begun improvidently, and, probably, continued blindly, had unhappily called together. For much in these complex facts the 'unions' are not responsible, but the moral of the whole story is that the operation of such societies works in an involved world, that it is protracted through a long line, and that in consequence of their surroundings and this long-continued action, it comes to produce effects which no one could have predicted, and which are quite against all the union ever aimed at. In 1825, the 'union' settled a book of prices which in forty years made this trade in London special and limited, and which prevented it from changing as it would have changed, and

growing as it would have grown. Justly the 'unions' were naturally active in raising London wages when much new capital was thronging to this kind of London business. But recently, owing to the augmented supply of labour collected by the late action of the unions, and the short demand for labour created by its former action, a local glut of labour was created, painful to the whole city, and disastrous to the labourers themselves. There are many indications that the best working men are coming to understand the necessity of great caution in wage-augmenting action, and it is much to be wished that the philanthropic patrons of trades' unions would exert their influence to aid and strengthen this wholesome feeling."

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### III.—*The Railways of India.*

FROM the *Pall Mall Gazette* of the 1st and the 8th October last:—

#### I.

"If the introduction of railways into India was tardy, their development in that vast country has, all things considered, been encouraging. Sixteen years ago India had no railways. In 1853 the first line was opened; by the end of the year 22 miles were in working order; now 3,943 miles are in use by the public. Since 1860 the construction of permanent ways has been effected with greater vigour than at first, for during the six years ended with 1866, no less than 2,735 miles of new road were laid down and opened. The average work of those years was 456 miles annually. Last year 349 miles more were added, and thus the aggregate mileage was brought up to the number stated above. Contrasted with the network of railways stretching over England, the Indian system appears simplicity itself; the roads are nearly all main or trunk lines. Of branches, at present there are very few indeed.

"Three companies—the East Indian, the Great Indian Peninsula, and the Madras—have between them to lay down 656 miles in addition to their existing works; that accomplished, Madras will be in direct railway communication with Bombay; from Bombay a line will run through Central India and join the East Indian at Allahabad, thence eastward to Calcutta, and westward to Delhi and the Punjab. From the terminus of the Punjab line at Moulton, goods and passengers can be carried down the Indus by the steam flotilla to the Scinde line, and by that means reach Kurrachee, the extreme north-western seaport. An inspection of the railway map of India shows that of existing lines there are three termini on the eastern and four on the western seaboard of the Peninsula. The route just traced lies along the grand arteries of traffic. Of the smaller lines the Bombay and Baroda and the Nagpore branch of the Great Indian drain the principal cotton fields.

"Though certain lengths have to be completed, yet the benefits, both strategical and commercial, already derived from the existing lines are enormous. Ten years ago, when only 300 miles of railway were opened, 'it took,' says Mr. Danvers, 'about four weeks to travel by dāk, and as many months to convey a regiment from Calcutta to Simla; now it occupies five or six days.'

"The railways are in the hands of eleven companies; their relative importance is disclosed by the figures of the subjoined table:—



*Mileage, 1st of May, 1868, and Locomotives and Rolling Stock of Indian Railways, 1st of January, 1868.*

Railway.	Miles Open.	Locomotives.	Passenger Carriages.	Total Vehicles, including Waggons and Trucks.
East Indian .....	1,356	425	850	6,052
Great Indian Peninsula .....	874	209	958	5,538
Madras .....	645	106	262	2,942
Bombay, Baroda, and Central India.....	306	65	181	3,055
Scinde .....	109	25	66	804
Punjaub .....	246	38	116	785
Delhi .....	54	6	107	361
Eastern Bengal .....	114	32	92	601
Great Southern of India.....	168	15	33	238
Calcutta and South-Eastern .....	29	12	56	534
Oude and Rohilkund .....	42	4	12	49
Total .....	3,943	937	2,733	20,959

“ The total length of lines at present sanctioned by Government is 5,609 miles, so that 1,666 miles remain to be finished. The East Indian main line has 145 miles, the Great Indian 393 miles, the Madras north-west line 180 miles, the Bombay and Baroda 7 miles, the Punjaub (Delhi line) 266 miles, the Eastern Bengal 45 miles, and the Oudh and Rohilkund no less than 630 miles. As the last company has only 42 lines opened, it must be the least advanced of any in the country. The other companies appear to have completed the lines sanctioned.

“ There are great variations discernible in the proportion of locomotives to mileage and to rolling stock on the different lines; thus, the East Indian has one locomotive to 3·18 miles, the Madras one to 6 miles, and the Great Southern one to 11 miles, while the ratio of vehicles to each locomotive on the respective roads was 14, 28, and 16. The great cotton line, the Bombay and Baroda, has 46 vehicles per locomotive.

“ The sketch map which accompanies the Government directors' report, shows that nearly all the great cotton fields of India are now connected by railroad with shipping ports. The collapse in the Indian cotton trade which followed the termination of hostilities in America must, to a considerable degree, have injured railway enterprise. During the half-year ended at Midsummer, India sent us only 729,000 bales of raw cotton; in the corresponding months of 1867, 940,000 bales; and for the same period of 1866, no less than 2,378,000 bales, or more than thrice this half-year's supply. Nevertheless, it is officially reported that ‘railways are beginning to tell upon the cultivation of cotton in India in other ways than merely providing a more rapid and less costly mode of conveyance than formerly. Steam factories for cleaning cotton are springing up; machines for half-pressing are established in many places, and in others steam presses for packing the bales for shipment have been constructed.’

“ Upwards of 75,000,000*l.* has been expended on the Indian railways; the chief part of that sum was subscribed in this country. The total number of proprietors on the 31st of December last was 49,690, of whom 40,221 were stockholders registered in England, and 819 in India; of the latter number, 422 are described as Europeans and 397 as natives. The debenture holders numbered 8,656.

“ To England also the contractors had to look for goods and machinery, as well as money. The value of railway material and machinery shipped hence to India during the years 1853-67 was 23,253,000*l.*, exclusive of freight and insurance,

which last year amounted to 25 per cent. on the value sent. These ponderous cargoes weighed in the aggregate 3,529,000 tons, and required 5,339 ships for their conveyance.

“A census of the number of persons employed on part of the railways was taken at Michaelmas last, when it appeared that there were 39,099 engaged; 36,048 were natives, and only 3,051 were set down as ‘Europeans and East Indians.’ At this time and for this number—the returns for the lines on the Bombay side are not included—2,475 miles and 271 stations were open; this, therefore, is less than two-thirds of the total mileage. It will be observed that of the railway establishments twelve out of thirteen employes are natives. True, this proportion does not hold with all departments; thus, in the printing and stationery department, of 362 persons engaged, 353 were natives; in the stores department, of 1,744 hands, 1,655 were natives; in the locomotive department there were 1,288 Europeans and East Indians to 5,219 natives; the special knowledge wanted for the latter department, rendering the employment of a larger number of Europeans necessary.

“The European portion of the railway service is composed of a class of men who until recently were little connected with any department of Indian administration. ‘A civil engineer was seldom seen in India before railways were introduced, and the usual staff of a railway, from the traffic manager and locomotive superintendent to the engine driver and stoker, were of course unknown. Now, it will be observed, they are to be counted by thousands. They go out from this country generally between 25 and 30 years of age, and many spend the best years of their lives there. The mortality amongst them, notwithstanding the exposure to which they are subject, has been below the average.’ The pay is already high, usually double that which a man of the same calling would obtain at home, and other inducements are held out to healthy and efficient hands to enter the Indian railway service.

“The capital authorised to be raised is at present upwards of 84,000,000*l.*; the amount actually raised up to the 31st of March of the current year, 76,579,000*l.*; 60,049,000*l.* on shares or stocks, and 16,530,000*l.* on debentures. Included in these sums is 9,000,000*l.* raised during 1867. The capital account of each company is shown hereunder:—

*Capital Authorised by Government; the Amount Raised, and the Amount Expended on Indian Railways up to the 31st of March, 1868.*

Railway.	Authorised Capital.	Amount Actually Raised.	Amount Withdrawn for Expenditure.
	£	£	£
East Indian .....	28,650,000	28,437,518	28,362,397
Great Indian Peninsula .....	19,000,000	18,248,180	17,614,686
Madras .....	10,000,000	9,550,441	8,785,962
Scinde .....	2,250,000	2,097,494	2,111,073
Indus Flotilla.....	624,000	331,405	577,052
Punjaub .....	2,750,000	2,040,253	2,618,391
Delhi .....	5,000,000	3,451,164	3,129,145
Bombay, Baroda, and Central India	7,500,000	7,369,164	7,206,126
Eastern Bengal .....	2,662,000	2,519,498	2,336,286
Calcutta and South-Eastern .....	600,000	441,350	615,242
Great Southern .....	1,350,000	1,350,000	1,354,077
Oude and Rohilkund .....	4,000,000	742,549	361,319
Total .....	84,386,000	76,579,016	75,071,656

“It would appear from this statement that, at the latest date to which the accounts were made up, 1,500,000*l.* odd was the cash balance in hand, for it had

not been 'withdrawn for expenditure.' The total amount of capital which the companies estimated they should require was 93,916,000*l.*; the Government sanction was, as the table shows, 10 per cent. under that sum.

"The money was obtained in the following manner:—

Raised in England—	£	£
By shares.....		59,253,013
„ convertible debentures.....	6,357,445	
„ inconvertible „ .....	10,172,700	
		16,530,145
Raised in India .....		795,858
Total at 31st of March, 1868 .....		<u>76,579,016</u>

"The pecuniary share of India in these great undertakings was evidently insignificant.

"The 75,000,000*l.* which has already been expended on the railways does not represent the whole of their cost. The land granted by Government to the companies cannot be taken at less than 2,500,000*l.*; besides this, the Government, by making up the difference between the contract rate of the rupee—namely 1*s.* 10*d.*—and the average rate of exchange during the construction of the works—*i.e.*, 2*s.*—has contributed about 8 per cent. to the capital expended in India. This difference in value would amount to 3,600,000*l.* 'The actual cost of the railways,' Mr. Danvers remarks, 'is thus raised from 75,000,000*l.* to 81,000,000*l.* But the amount upon which the profits are divisible is, fortunately for the companies, limited to their contribution.'

"Of the shareholders' contributions 45,000,000*l.* were expended in India, and for goods, freight, and insurance 30,000,000*l.* in England."

## II.

"We are told that 'Indian railways do not form an exception to the rule that expenditure always exceeds estimates. In some cases the cost has been three or four times greater than was expected. In others the excess has been very small.' If the companies have had grants of land and other advantages afforded them by Government, the charge for freight and marine insurance has borne heavily upon their resources. The East Indian line will average about 22,000*l.* per mile, but this expenditure includes losses occasioned by the mutiny. The Bombay and Baroda will be at the same rate until the extension to Delhi is completed. The Scinde will cost 20,000*l.* The Madras has cost only 12,000*l.* or thereabouts; the Great Southern, 10,000*l.*; and the line between Cawnpore and Lucknow less than 7,000*l.* per mile.

"The bulk of the expenditure on each line is stated in the report under five or six chief heads for each company. We select the four largest undertakings:—

Chief Items of Expenditure.	Railways.			
	East Indian.	Great Indian Peninsula.	Madras.	Bombay, Baroda, &c.
	£	£	£	£
Works and bridges .....	8,775,000	6,845,600	2,446,900	2,896,500
Permanent way and stations.....	6,485,000	4,938,500	2,999,800	1,735,400
Freight and insurance .....	2,785,000	1,817,700	1,061,000	586,800
Rolling stock and engines.....	3,145,000	1,888,000	798,000	1,096,800
Establishments .....	3,380,000	1,156,200	717,200	433,800
Miscellaneous, electric tele- graph stores, &c. ....	3,352,000	196,000	362,700	470,000
Total .....	27,922,000	16,842,000	8,385,600	7,219,300

“The construction of the Madras line, one of the cheapest, involved an outlay of one-eighth of the total expenditure for freight and insurance. The Bombay and Baroda appears to have been more fortunately situated with respect to the same items.

“Single rails are characteristic of the Indian permanent way. Of nearly 4,000 miles now open, only 209 are provided with double rails, and these are found on four lines, viz., the East Indian, which has  $94\frac{1}{4}$ ; the Great Indian Peninsula, 98; the Bombay, Baroda, and Central India,  $11\frac{3}{4}$ ; and the Scinde 5 miles. The traffic is eminently a goods traffic, for less than one-third of the total revenue is raised from passengers. The passenger traffic is markedly a third-class traffic. Last year  $13\frac{3}{4}$  million of passengers were conveyed by the various Indian lines, and of those persons 13,000,000 were third-class and parliamentary passengers. This contrasts curiously with the statistics of passenger traffic in this country, where the travellers hold this proportion or thereabouts—to four persons using the third-class and parliamentary carriages there are two who go by the second-class, and one who travels first-class. Season ticket holders on Indian lines are numerically insignificant, being but slightly over 6,000. The passenger traffic for each line is shown by the following table:—

*Passenger Traffic of Indian Railways for the Year ended the 30th of June, 1867.*

Railway.	Number of Passengers.			
	First Class.	Second Class.	Third Class and Parliamentary.	Total.
East Indian .....	34,119	111,850	4,280,642	4,426,611
Great Indian Peninsula .....	32,688	207,761	2,830,164	3,070,613
Madras .....	8,019	70,375	1,833,752	1,912,146
Bombay, Baroda, and Central India } .....	7,102	40,216	1,505,404	1,552,722
Scinde .....	2,097	5,549	135,589	143,235
Punjaub .....	6,312	25,383	585,113	616,809
Eastern Bengal .....	39,827	47,957	1,102,504	1,190,289
Great Southern of India .....	2,133	—	437,027	439,160
Calcutta and South-eastern .....	3,653	16,215	339,277	359,145
Oude and Rohilkund.....	301	813	34,469	35,584
Total .....	136,251	526,119	13,083,941	13,746,311

“Indian fares are low. The third-class vary from one-third of a penny to one halfpenny per mile; the second-class from three-farthings to something over 1d. per mile; and the first-class from  $1\frac{1}{4}d.$  to  $2\frac{3}{4}d.$  a mile.

“With the exception of sheep, the live stock traffic appears to be very small. During the year the Great Indian conveyed 208,000, and the Bombay and Baroda 212,000 sheep. The aggregate weight of general merchandise carried, exclusive of minerals, was nearly 2,000,000 tons. Excluding shunting, the number of miles travelled by trains of the four largest companies were these: the East Indian, 5,239,000 miles; the Great Indian Peninsula, 2,630,000 miles; the Madras, 1,362,000 miles; and the Bombay, Baroda, and Central India, 757,000 miles during the year.

“The subjoined statement shows that the aggregate gross receipts of all the companies in 1866-67, approached the large sum of 5,000,000*l.*, of which 1,377,000*l.* was collected from passengers, or 100,000*l.* more than in the previous year; and 3,321,000*l.* for minerals and goods, showing an increase of 229,000*l.*;

the year's increase, therefore, from both branches of receipt was 329,000*l.*—this was on the 'gross receipts,' be it observed. The net revenue was only 32,000*l.* in excess of the previous twelve months. But last year the increase over its predecessor was very large, for it is stated that in the 'two years the revenue has increased upwards of 1,000,000*l.*'

*Receipts of Indian Railways for the Year ended with 30th June, 1867.*

Railway.	From			Total.
	Passengers, &c.	Goods and Minerals.	Telegraph and Sundries.	
	£	£	£	£
East Indian .....	557,511	1,488,290	111,333	2,157,134
Great Indian Peninsula.....	323,880	1,073,811	19,469	1,417,160
Madras .....	168,375	280,929	16,282	465,586
Bombay, Baroda, and Central } India .....	186,546	225,113	22,066	433,725
Scinde .....	15,067	96,225	—	111,292
Punjaub .....	34,869	56,977	—	91,846
Eastern Bengal .....	61,666	71,608	7,083	140,357
Oude and Rohilkund* .....	2,540	120	—	2,660
Great Southern of India .....	26,358	27,534	1,460	55,352
Total .....	1,376,812	3,320,607	177,693	4,875,112

\* For nine weeks only, viz., from 9th April.

"The working expenses and maintenance of the Indian lines absorbed more than half the gross receipts; here, at home, the corresponding charges are very appreciably less than one-half of the receipts. The total expenditure of the Indian companies amounted to 2,538,000*l.*, leaving 2,337,000*l.* as net receipts.

*Expenditure and Net Receipts of Indian Railways for the Year ended with the 30th of June, 1867.*

Railway.	Expenditure.			Net Receipts.
	Working Expenses.	Maintenance.	Total.	
	£	£	£	£
East Indian .....	782,897	201,544	984,441	1,172,693
Great Indian Peninsula .....	624,323	159,792	784,115	633,045
Madras .....	137,724	66,805	204,529	261,057
Bombay, Baroda, and Central } India .....	233,311	76,336	309,647	124,078
Scinde .....	—	—	89,136	22,156
Punjaub .....	—	—	71,314	20,532
Eastern Bengal .....	54,111	14,247	68,358	71,999
Oude and Rohilkund* .....	1,160	—	1,160	1,500
Great Southern of India .....	19,955	5,157	25,112	30,240
Total .....	1,853,481	523,881	2,537,812	2,337,300

\* For nine weeks only.

"Mr. Danvers has instituted a rather minute comparison of receipts and expenditure per train mile of the Indian lines with those of Great Britain and the Grand Trunk Line of Canada. We place the receipts and the expenses in juxtaposition after the names of a few lines, by way of illustration, thus :—East Indian, 8*s.* 3*d.*—3*s.* 6*d.*; Great Indian Peninsula, 10*s.* 9*d.*—6*s.*; Madras, 6*s.* 1*d.*—3*s.* 1*d.*; Bombay, Baroda, and Central India, 11*s.*—7*s.* 4*d.* The railways of Great Britain in 1865, 5*s.* 1½*d.*—2*s.* 6*d.*; and the Grand Trunk of Canada in 1866, 5*s.* 7½*d.*—4*s.* The Indian bear comparison with the British lines, but their economic plight would be wretched indeed if they approached the condition of the great Canadian company. The price of fuel seriously affects the cost of the locomotive departments of the various companies. In the East Indian the locomotive expenditure per train mile was 1*s.* 3½*d.*; in the Great Indian Peninsula it was 2*s.* 6¾*d.*; in the Bombay and Baroda it was 2*s.* 3¾*d.*; and in the Madras, 1*s.* 1½*d.* It is officially stated that 'with regard to wood fuel, measures have been taken by the Government for planting and preserving forests for the purpose. With respect to coal, an abundant supply is obtained in Bengal; but the beds in Central India have not yet been made available for railway purposes, access to them having been delayed by the tardy operations of the Great Indian Peninsula Railway.' But little insight of these lines is needed to discover how much their prosperity is dependent on the price of fuel. The line last named paid 51*s.* a ton for coal; the cost in England being 27,418*l.*, the freight, &c., amounting to nearly four times that sum, namely, 98,708*l.*; coke, 62*s.* a ton; and patent fuel, 54*s.* a ton; and these are not the highest figures quoted. The Madras lines are as dependent on England for coal as the companies in Western India. The lower expenditure of the Madras 'is partly due to the more general use of wood, but partly also to the economical system of management, which reflects credit on the railway authorities in the Madras presidency.'

"Perhaps no better evidence is wanted of the general success of Indian railways than that afforded by the large sum recouped the Government for guaranteed interest. The whole sum which has been paid by Government under its guarantee, now amounts to 22,212,500*l.*, of which about 9,500,000*l.* has been recovered from the companies, leaving something above 12,000,000*l.* as their present debt, and which is chargeable against the half of their surplus profits over 5 per cent. The interest advanced to the companies in 1867 was 3,238,000*l.*; almost all of this was paid in England.

"We conclude with a passage that may be profitably conned by railway directors in this country. 'One great advantage of the guarantee system,' observes Mr. Danvers, 'is that it provides effectual means for keeping the capital and revenue accounts perfectly distinct. Every sixpence which is advanced by the Government for interest on the capital, both before and after the lines are opened, is charged against revenue. An account is kept of the sums so advanced, and the Government is reimbursed, under the terms of the contracts, out of the profits of the railways. Rules have, moreover, been laid down for the guidance of those who have to make up and examine the half-yearly revenue accounts. True and real profits are carefully defined, and it is shown how they are to be ascertained.' By these means the confusion between capital and revenue accounts is rendered impossible."

#### IV.—*Post Office Annuities and Assurances.*

FROM the *Pall Mall Gazette*:—

"We recently adverted to the annuity and life assurance business of the General Post Office. The figures were quoted from the annual report of the department, which gave the history of its proceedings up to the close of 1866. A subsequent report continues the information to the end of 1867. The whole sum

received for immediate and deferred annuities was 143,217*l.* This was the result of two years and eight months' working. The post office began this branch of its multifarious duties on the 17th of April, 1865. In addition to the ordinary payments there were certain fees received on 'annuity contracts,' amounting to 736*l.*; hence, the total was 143,953*l.* The premiums were paid in 1,329 separate sums, thus:—For 'immediate annuities,' 136,637*l.* in 552 sums; for 'deferred annuities and monthly allowances, money not returnable,' 3,893*l.* in 129 sums; and for 'deferred annuities and monthly allowances, money returnable,' 2,687*l.* in 548 sums. The post office has, during the whole term, paid to its annuitants 11,650*l.*, and 'repaid to contractors' premiums to the extent of 227*l.* The whole was, therefore, 11,877*l.* The year 1866 began with 400 annuitants, who were then or had been, on the books, and closed with 709; the total sum for which contracts had been granted was 15,437*l.*, thus distributed:—

	£	s.
For 551 immediate annuities .....	12,393	17
„ 57 deferred annuities and monthly allowances, money not returnable.....	1,125	11
„ 101 deferred annuities and monthly allowances, money returnable .....	1,917	18

But the contracts in force on the 31st of December, 1867, were less than this, for twenty-seven appear to have been determined—six in the first, five in the second, and sixteen in the third section, leaving the Government liable for 14,820*l.* It is plain from the foregoing statistics, that 'immediate annuities' are by far the most popular investments. Considering the facilities and advantages of the post office scheme, the development of the business is certainly slow. On the 31st of December, 1866, the office had received in premiums 4,005*l.*; in the following year 3,580*l.* was added thereto, making the total sum received in two years and nine months 7,585*l.* That was paid in 10,256 sums; consequently the average payments were rather under *fifteen shillings* each. There were 1,168 policies issued by the 31st of December, 1866; but in the subsequent twelve months only 364 were granted. The aggregate number issued was 1,532, and the total amount insured 114,900*l.* But since the whole number in force at the end of last year was only 1,485, there were forty-seven policies which had lapsed or had been satisfied. Of all the lives insured only six had fallen in, and upon those the office paid 388*l.* Whether this be a large or small proportion to the number of selected lives, we must leave actuaries to answer. The charges of management for both annuities and insurances during the two years and three quarters were 2,911*l.*; against which the office received in the shape of fees, on the grant of certain annuities, 736*l.* Whether or not the slow progress of the annuity scheme is owing to the preference of working men for less secure associations connected with their unions, it is clear that there is no popular distrust of the post office. In the postal savings banks the money standing to the credit of 851,000 depositors on the 31st of December, 1867, was little short of 10,000,000*l.* sterling. There can be no stronger mark of public confidence than this."